Evaluation of congenital heart disease in Nigerian children with pneumonia

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Background: Pneumonia is a common cause of childhood morbidity and mortality globally. Some congenital heart disease (CHD) may predispose their sufferer to bronchopneumonia.

Objective: To evaluate the contribution of CHD to pneumonia in children seen in a tertiary hospital in the Niger Delta region of Nigeria.

Methods: Over a year, consecutive diagnosed radiologically with pneumonia were evaluated echocardiographically for CHD. Certain characteristics in children with pneumonia and CHD were compared to those without CHD.

Results: There were 121 children with pneumonia of which 61 (50.40%) were males and their mean age was 10.2 + 10.93 months. The prevalence of CHD was 14 (11.57%), the commonest CHD was ventricular septal defect (VSD) in 7 (50.00%). Most of the CHD with septal defect had moderate to large defects. Children with CHD were 3 and 256 times more likely to have heart failure and murmur respectively compared to those without CHD, p=0.084 and <0.0001. Children with CHD stayed longer in the hospital 11.50 + 7.03 days than those without CHD 7.38 + 5.34 days, p=0.012.

Conclusion: The children with CHD were more likely to have heart failure and murmur compared to those without CHD. Prevalence of CHD in children with pneumonia in this study is high, evaluation of children with pneumonia for CHD is therefore recommended.

Inferior myocardial infarction after blunt chest trauma

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A 44 year old Caucasian male presented with substernal chest pain that began minutes after suffering a fall on the chest during a hockey game. The patient initially thought the pain was a result of the fall itself and proceeded to rest for a few minutes. He quickly realized that his condition was not improving, but was in fact worsening. The patient has a history of hypertension controlled with 50 mg daily of Lisinopril and hyperlipidemia medicated with Fenofibrate 200 mg daily. His family history is significant for CAD as his brother and grandfather died at 42 and 50 years of age, respectively, as a result of an myocardial infarction. When his pain became unbearable, the patient drove himself to an urgent care center where a 12-lead EKG showed a STEMI on inferior leads, he was transferred to our hospital where an emergent coronary angiogram showed a hyperdominant right circulation with a fresh clot completely obstructing mid RCA, for which thrombectomy trials have failed. He was immediately transferred to the OR where an emergent CABG was done; the thrombus was removed, and a dissection was visualized. Following the procedure, he was admitted to the coronary care unit for observation. The patient's hospital course was complicated by right ventricular failure (EF=40%), atrial fibrillation and hypotension. Eventually, the patient was stabilized and discharged on post-operative day 11. Trauma induced myocardial infarction is a rare clinical entity. Both diagnosis and management is delayed in many instances, contributing to suboptimal outcomes in many cases. Every effort should be made to avoid such delays, and this condition should be kept in mind, even in the light of polytrauma.